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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,417	08/24/2004	Hiroshi Kaneta	8017-1141	7384

466 7590 04/13/2006

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EXAMINER

LEE, CYNTHIA K

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/505,417	Applicant(s) KANETA ET AL.	
	Examiner Cynthia Lee	Art Unit 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

This Office Action is responsive to the amendment filed on 3/13/2006. Claim 15-17 has been added. Claims 1-17 are pending. Claim 1 has been amended.

Applicant's arguments have been fully considered and are persuasive and 35 USC 102 rejection has been overcome. However, upon further consideration, the instant claims are rejected under new grounds of rejections and thus, claims 1-17 are finally rejected for reasons of record and for reasons necessitated by applicant's amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7, 9, 10, 13, and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanafusa (US 6844105) in view of Maki (JP 2002-117819).

Hanafusa discloses a plate secondary battery comprising an anode, a cathode, positive and negative electrode terminals for charge and discharge, the terminals extended from said positive and negative electrode collectors. The third terminal is opposite and remote from the positive electrode terminal (23a in fig. 6) and possesses a temperature detecting sensor (45 on fig. 6). Hanafusa's battery has an alternating stack of anode elements and cathode elements with a separator sandwiched in between. The battery is encased in a laminate film. (6:15-30 and 9: 30-40)

Although Hanafusa does not expressly disclose that the third terminal extends in the perpendicular direction, Maki teaches that the temperature sensing element is fixed

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perpendicular to the electrode terminals. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to dispose Hanafusa's third terminal perpendicular to the positive electrode terminal for the benefit of laying the third terminal flat on the body of the battery and avoiding the formation of a projection.

Claims 5, 8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanafusa and Maki (JP 2002-117819) as applied to claim 1 above and incorporated herein, and further in view of Higashijima (US 5886502).

Hanafusa and Maki do not disclose a third terminal connected to a cell balancer circuit. However, Higashijima discloses a cell balancer circuit connected to cells connected in series to detect difference in voltage among the cells. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a cell balancer circuit to the cell terminal for the benefit of detecting the voltage of the cells and achieving a balance of voltages among the cells, as taught by Higashijima (abstract, 1:5-10, 2:40-45). The Office notes that since Hanafusa's third terminal is connected to the cathode terminal via a wire, the third terminal is necessarily connected to a cell balancer circuit.

Response to Arguments

Applicant's arguments filed 3/13/2006 have been fully considered but they are not persuasive.

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Applicant's arguments with respect to the direct contact of PTC to one of the electrode terminals have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that further references do not disclose or suggest a cell balancer circuit is connected to the third terminal and therefore cannot achieve the advantage of the present invention that the space required to incorporate the cell balancer is reduced.

The Office notes that since Hanafusa's third terminal is connected to the cathode terminal via a wire, the third terminal is necessarily connected to a cell balancer circuit. Further, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Findings of an additional advantage associated with doing what the prior art suggests does not lend patentability to an otherwise unpatentable invention. See *In re Linter*, 458, F.2d 1013, 173 USPQ 560 (CCPA 1972) and *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990). See MPEP 2145.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Lee whose telephone number is 571-272-8699. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RAYMOND ALEJANDRO
PRIMARY EXAMINER